

## Laccase F

Benzenediol: oxygen oxidoreductase  
EC 1.10.3.2

Description:	Enzyme preparation which oxidised monovalent and polyvalent phenolic compounds. It catalyses reactions to products similar like humic substances under less oxygenic conditions. Particularly Laccase C oxidises mono-phenols to into the corresponding chinones and phenoxyradicals which polymerises spontaneously and are precipitated in the solution at less oxygenic content.						
Origin:	<i>Funalia trogii</i> .						
Application:	<ul style="list-style-type: none"><li>• precipitation of phenolic substances</li><li>• enzymatic browning of food (cacao, coffee)</li><li>• glueing of flake boards</li><li>• modification of elasticity and consistency of pastes, gums dispersion media, phenolic resins</li><li>• production of microbiocides</li><li>• analysis of phenols</li></ul>						
Activity:	> 8.000 U/g substrate: Syringaldazin > 50.000 U/g substrate: ABTS (Methods: ASA Spezialenzyme GmbH)						
Substratespezifity:	Laccase F converts a lot of phenolic and halogenated substrates.						
Parameters of reaction:	<table><tr><td><u>pH</u></td><td>optimum &lt; 3.0</td><td>active within pH 2.0 – 7.0</td></tr><tr><td><u>temperature</u></td><td>optimum 55°C</td><td>active within 20 – 70°C</td></tr></table>	<u>pH</u>	optimum < 3.0	active within pH 2.0 – 7.0	<u>temperature</u>	optimum 55°C	active within 20 – 70°C
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<u>temperature</u>	optimum 55°C	active within 20 – 70°C					
Order-No.:	2035						
Form of delivery:	dark brown powder (lyophilisate)						
Storage:	4°C						
Literature:	Ming-Qiang Ai, (2015), J. Microbiol. Biotechnol., <u>25(8)</u> , 1361-1370						